REMARKS

Status of the Claims

Claims 1-34 are currently pending in the application. Claims 1-9, 22, 23, 25 and 34 stand rejected. Claims 10-21, 24 and 26-33 have been withdrawn in response to a prior restriction requirement. Claims 1, 6 and 22 have been amended as set forth herein. All amendments are made without prejudice or disclaimer. No new matter has been added by way of the present amendments. Specifically, the amendment to claim 1 removes language directed at nucleotides hybridizing to SEQ ID NO:1. The amendment to claim 6 is to remove its dependency on claim 1. The amendment to claim 22 is fully supported by the original claims. Reconsideration is respectfully requested.

Rejections Under 35 U.S.C. § 112, First Paragraph

Written Description/New Matter

Claims 1-9, 22, 23, 25 and 34 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description/new matter requirement. (*See*, Office Action of April 24, 2006, at page 21, hereinafter "Office Action"). Applicants traverse the rejection as set forth herein.

The Examiner states that the amended claims refer to a homologue of SEQ ID NO:1-encoded polypeptide. (*Id.*). The Examiner also states that this element is not disclosed in the as-filed specification. (*Id.*). Specifically, the Examiner states that "a homologue of a SEQ ID NO:1-encoded polypeptide wherein said homologue is at least 79% homologous to a SEQ ID NO:1-encoded polypeptide" is not disclosed in the as-filed specification. (*Id.*).

The only claim reciting this phrase was claim 1. However, claim 1 has been amended and now does not recite the phrase upon which the Examiner bases the present rejection, thus obviating the rejection.

Written Description

Claims 1-8, 22, 23, 25 and 34 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement. (*See*, Office Action, at pages 3-7). Applicants traverse the rejection as set forth herein.

In response to Applicants' arguments presented in the Reply of March 14, 2006, the Examiner states that the arguments were considered but not found persuasive because "the structure function relationship required for hybridization language has not been presented," and because "the specification fails to set forth a particular assay or test to determine the function." (*Id.* at page 7).

Although Applicants maintain that the claims are adequately supported by the as-filed specification, claim 1 has been amended herein to recite, "An isolated, purified DYXC1 nucleic acid selected from the group consisting of: SEQ ID NO:1 or the complement of SEQ ID NO:1." Thus, as amended, claim 1 no longer recites nucleic acids hybridizing to SEQ ID NO:1 nor homologs of SEQ ID NO:1.

Claim 22 has been amended to recite, "A kit for use in the diagnostics of dyslexia or in assessing the predisposition of an individual to dyslexia, comprising a container; and in said container: a compound hybridizing specifically to a nucleic acid sequence of SEQ ID NO:1 or

the complement thereof." Thus, as amended claim 22 also does not recite homologs. Thus, claim 22 is believed to comply with the written description requirement.

Since no specific reasoning is provided for the rejection of dependent claims 2-8, 23, 25 and 34, dependent claims 2-8, 23, 25 and 34 are believed to also satisfy the written description requirement as, *inter alia*, depending from supported base claims, independent claims 1 and 22, or intermediate claims depending therefrom.

Reconsideration and withdrawal of the written description rejection of claims 1-8, 22, 23, 25 and 34 are respectfully requested.

Enablement

Claims 1-9, 22, 23, 25 and 34 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the enablement requirement. (*See*, Office Action, at page 8). Applicants traverse the rejection as set forth herein.

Amendments to claims 1 and 22 were discussed above and statements regarding the amendments. Those statements are incorporated herein for the purpose of rebutting the enablement rejection. That is, as amended, it is believed that claims 1 and 22 are fully compliant with the enablement requirements of 35 U.S.C. § 112, first paragraph.

As to claim 9, the Examiner states no particular reason for asserting that claim 9 lacks enablement. Claim 9 appears to be unaddressed. Thus, for the same reasons given above, it is believed claim 9 is also fully enabled by the as-filed specification.

Since no specific reasoning is provided for the rejection of dependent claims 2-8, 23, 25 and 34, dependent claims 2-8, 23, 25 and 34 are believed to also satisfy the written description

requirement as, *inter alia*, depending from supported base claims, independent claims 1 and 22, or intermediate claims depending therefrom.

Reconsideration and withdrawal of the enablement rejection of claims 1-8, 22, 23, 25 and 34 are respectfully requested.

Rejections Under 35 U.S.C. § 102(a)

Claims 1-6 and 9 stand rejected under 35 U.S.C. § 102(a) as being anticipated by Taipale et al., GenBank Accession Number AF337549 (hereinafter referred to as "Taipale et al."). (*See*, Office Action, at page 15). Applicants traverse the rejection as set forth herein.

The Examiner states that Taipale et al. disclose EKN1 wherein nucleotides 1-1263 are 100% identical to nucleotides 369-1631 of SEQ ID NO:1, recited in claim 1. However, Taipale et al. is a publication made by the inventors of the present application. Thus, Taipale et al. is not available as prior art.

Furthermore, the remaining nucleotides of SEQ ID NO:1 are not disclosed by Taipale et al. Additionally, as amended, claim 1 no longer recites homologs nor sequences which hybridize to SEQ ID NO:1. Thus, as amended, claim 1 is not anticipated by NIH-GMC because NIH-GMC does not disclose SEQ ID NO:1.

Since claim 9 is directed to the amino acid sequence encoded by SEQ ID NO:1, that amino acid sequence being SEQ ID NO:3, it is unclear how Taipale et al. could anticipate claim 9 since Taipale et al. do not disclose all of SEQ ID NO:1. Thus, claim 9 cannot be anticipated by Taipale et al.

Dependent claims 2-6 are not anticipated as, *inter alia*, depending from a non-anticipated base claim, claim 1.

Reconsideration and withdrawal of the anticipation rejection of claims 1-6 and 9 are respectfully requested.

Rejections Under 35 U.S.C. § 102(b)

GenBank Accession Number BE972748

Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by NIH-MGC, GenBank Accession Number BE972748 (hereinafter referred to as "NIH-MGC"). (*See*, Office Action, at page 14). Applicants traverse the rejection as set forth herein.

The Examiner states that the nucleotide sequence 364 disclosed in NIH-MGC is 100% identical to nucleotides 686-1049 of SEQ ID NO:1. However, the remaining nucleotides of SEQ ID NO:1 are not disclosed by NIG-GMC. Furthermore, as amended, claim 1 no longer recites homologs nor sequences which hybridize to SEQ ID NO:1. Thus, as amended, claim 1 is not anticipated by NIH-GMC because NIH-GMC does not disclose SEQ ID NO:1.

Dependent claims 2-8 are not anticipated as, *inter alia*, depending from a non-anticipated base claim, claim 1.

Reconsideration and withdrawal of the anticipation rejection of claims 1-8 are respectfully requested.

Applied Biosystems Catalog, 1993

Claims 22, 23 and 25 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Applied Biosystems Catalog, 1993, pages 135-164 (hereinafter referred to as "ABS"). (*See*, Office Action, at page 16). Applicants traverse the rejection as set forth herein.

The Examiner states that claim 22 is not directed to a compound that specifically detects the DYXC1 gene. (*Id.* at page 18).

Claim 22 has been amended to recite, "A kit for use in the diagnostics of dyslexia or in assessing the predisposition of an individual to dyslexia, comprising a container; and in said container: a compound hybridizing specifically to a nucleic acid sequence of SEQ ID NO:1 or the complement thereof." Thus, as amended claim 22 also does not recite homologs. Further, claim 22, as amended, does recite a nucleic acid of a particular structure, and recites a compound which "specifically hybridizes to a nucleic acid sequence of SEQ ID NO:1." Thus, this compound specifically detects the DYXC1 gene.

Thus, claim 22 cannot be anticipated by the disclosure of ABS because ABS does not disclose all of SEQ ID NO:1.

Dependent claims 23 and 25 are not anticipated as, *inter alia*, depending from a non-anticipated base claim, claim 22.

Reconsideration and withdrawal of the anticipation rejection of claims 22, 23 and 25 are respectfully requested.

Rejections Under 35 U.S.C. § 103(a)

Claims 22, 23 and 25 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Ahern, *The Scientist*, 9(15):20, 1995 (hereinafter referred to as "Ahern"). (*See*, Office Action, at page 19). Applicants traverse the rejection as hereinafter set forth.

The Examiner states that claim 22 is drawn to a compound capable of detecting the DYXC1 gene and that the 10-mer array of Brennan would be capable of detecting this gene. (*Id.* at page 20).

However, claim 22 has been amended to recite, "A kit for use in the diagnostics of dyslexia or in assessing the predisposition of an individual to dyslexia, comprising a container; and in said container: a compound hybridizing specifically to a nucleic acid sequence of SEQ ID NO:1 or the complement thereof." Thus, as amended claim 22 also does not recite homologs. Claim 22, as amended, does recite a nucleic acid of a particular structure, a compound which "specifically hybridizes to a nucleic acid sequence of SEQ ID NO:1."

Therefore, claim 22 cannot be obvious in light of the disclosures of Brennan and Ahern because neither reference, either considered in combination or separately, disclose or suggest all of the elements of claim 22. (*See*, *In re Vaeck*, 947 F.2d 488, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991)).

Since no specific reasoning is provided for the rejection of dependent claims 23 and 25, dependent claims 23 and 25 are not obvious as, *inter alia*, depending from a non-obvious base claim, claim 22.

Reconsideration and withdrawal of the anticipation rejection of claims 22, 23 and 25 are respectfully requested.

ENTRY OF AMENDMENTS

The amendments to the claims should be entered by the Examiner because the amendments are supported by the as-filed specification and do not add any new matter to the application. Additionally, the amendments should be entered since they comply with requirements as to form, and place the application in condition for allowance. Further, the amendments do not raise new issues or require a further search since the amendments incorporate elements from dependent claims into independent claims and/or are supported by the as-filed specification. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested since they certainly remove issues for appeal.

CONCLUSION

If the Examiner has any questions or comments, please contact Thomas J. Siepmann, Ph.D., Registration No 57,374 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to our Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under § 1.17; particularly, extension of time fees.

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Respectfully submitted,

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